

FILE 'HOME' ENTERED AT 14:26:47 ON 24 JUN 2004

=> file agricola biosis caplus caba

=> s cellulase and review

L1 944 CELLULASE AND REVIEW

=> duplicate remove l1

L2 882 DUPLICATE REMOVE L1 (62 DUPLICATES REMOVED)

=> d ti 1-50

L2 ANSWER 1 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Useful microbial enzymes

L2 ANSWER 2 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Properties of cellulases produced by *Aspergillus oryzae* and its effect on Sake moromi fermentation

L2 ANSWER 3 OF 882 CABA COPYRIGHT 2004 CABI on STN

TI Production of enzymes for environmental applications - a **review**.

L2 ANSWER 4 OF 882 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN DUPLICATE 1

TI Thermostable and alkaline-tolerant microbial **cellulase**-free xylanases produced from agricultural wastes and the properties required for use in pulp bleaching bioprocesses: a **review**.

L2 ANSWER 5 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI New methods for architectures of glyco-materials

L2 ANSWER 6 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Glycomics on plants

L2 ANSWER 7 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Cellulases in food processing

L2 ANSWER 8 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Methodologies for assaying the hydrolysis of cellulose by cellulases

L2 ANSWER 9 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Sub-Angstrom resolution enzyme x-ray structures: is seeing believing?

L2 ANSWER 10 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Comparative genomics of cellulolytic microorganisms

L2 ANSWER 11 OF 882 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN

TI Regulation of gene expression in industrial fungi: *Trichoderma*.

L2 ANSWER 12 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Application of microbial genes to recalcitrant biomass utilization and environmental conservation

L2 ANSWER 13 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Anti-inflammatory constituents, aloesin and aloemannan in *Aloe* species and effects of tanshinone VI in *Salvia miltiorrhiza* on heart

L2 ANSWER 14 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Study progress of **cellulase**

L2 ANSWER 15 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Amplification of **cellulase** genes and **cellulase** hyperproducers in *Trichoderma*: Minireview

L2 ANSWER 16 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Research progress of exogenous enzymes in tea processing

L2 ANSWER 17 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Carbohydrate-active enzymes from alkaliphiles

L2 ANSWER 18 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI *Clavibacter michiganensis* subsp. *michiganensis*: First steps in the understanding of virulence of a Gram-positive phytopathogenic bacterium

L2 ANSWER 19 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Deinking mechanism of **cellulase**

L2 ANSWER 20 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI Enzyme stabilization - recent experimental progress
 L2 ANSWER 21 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Some future aspects in wet end chemistry
 L2 ANSWER 22 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Cellulose-binding domains: Tools for innovation in cellulosic fiber production and modification
 L2 ANSWER 23 OF 882 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 TI Regulation of *Trichoderma* **cellulase** formation: Lessons in molecular biology from an industrial fungus: A **review**.
 L2 ANSWER 24 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI The cellulosome - a nano-machine for the degradation of cellulose
 L2 ANSWER 25 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Modulation of wood fibers and paper by cellulose-binding domains
 L2 ANSWER 26 OF 882 CABA COPYRIGHT 2004 CABI on STN
 TI Application of microbial genes for utilization of biomass.
 L2 ANSWER 27 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Mechanism of **cellulase** action on cellulose structure
 L2 ANSWER 28 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Production technology for biomass ethanol
 L2 ANSWER 29 OF 882 CABA COPYRIGHT 2004 CABI on STN
 TI [Application and effects of enzymes in animal feed with a **review** of our legislative regulations].
 Primjena i djelovanje enzima u ishrani stoke s osvrtom na nasu zakonsku regulativu.
 L2 ANSWER 30 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Microbial pretreatment of biomass. Potential for reducing severity of thermochemical biomass pretreatment
 L2 ANSWER 31 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Enzymes in textile wet processing
 L2 ANSWER 32 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Tailed enzymes
 L2 ANSWER 33 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Search for useful enzymes from marine invertebrates
 L2 ANSWER 34 OF 882 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 TI Developments in industrially important thermostable enzymes: A **review**.
 L2 ANSWER 35 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI The cellulases and their application in degrading agroindustrial waste
 L2 ANSWER 36 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI *Thermomyces lanuginosus*: properties of strains and their hemicellulases
 L2 ANSWER 37 OF 882 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN
 DUPLICATE 3
 TI Towards understanding the role of membrane-bound endo-beta-1,4-glucanases in cellulose biosynthesis.
 L2 ANSWER 38 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI The Structure and Mechanism of Action of Cellulolytic Enzymes
 L2 ANSWER 39 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Improvement of material utilization in sake moromi brewing by addition of cell wall macerating enzymes
 L2 ANSWER 40 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Analyses and utilization of complex microbial community
 L2 ANSWER 41 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Enzymes
 L2 ANSWER 42 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Creating biodegradable plastics from paper mill sludge
 L2 ANSWER 43 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Ethanol production from woody biomass

L2 ANSWER 44 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Hyperthermostable cellulolytic and hemicellulolytic enzymes and their biotechnological applications

L2 ANSWER 45 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Progress of study on enzymic hydrolysis of chitosan

L2 ANSWER 46 OF 882 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 TI Microbial cellulases (**Review**).

L2 ANSWER 47 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Anti-infective agents produced by the hyphomycetes genera Trichoderma and Gliocladium

L2 ANSWER 48 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Microbial cellulases

L2 ANSWER 49 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Recent progress in cellulose biosynthesis

L2 ANSWER 50 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Changes in cell wall components and related hydrolytic enzymes in fruit softening

=> d bib abs 48 46 38 37 35 34 27 23 26 15

L2 ANSWER 48 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:676502 CAPLUS
 DN 137:290725
 TI Microbial cellulases
 AU Rabinovich, M. L.; Melnik, M. S.; Bolobova, A. V.
 CS Bach Inst. of Biochemistry, Russian Academy of Sciences, Moscow, 119071, Russia
 SO Applied Biochemistry and Microbiology (Translation of Prikladnaya Biokhimiya i Mikrobiologiya) (2002), 38(4), 305-321
 CODEN: APBMAC; ISSN: 0003-6838
 PB MAIK Nauka/Interperiodica Publishing
 DT Journal; General Review
 LA English
 AB A **review**. Compsn. of **cellulase**-hemicellulase systems of aerobic fungi (hyphomycetes, ascomycetes, and basidiomycetes), aerobic bacteria, actinomycetes, as well as anaerobic fungi and bacteria, are considered in the context of the modern structural classification of glycosyl hydrolases. A new nomenclature of cellulases and relative enzymes based on their structural classification is reviewed. Some opportunities of **cellulase** improvement by means of protein engineering are discussed.

RE.CNT 98 THERE ARE 98 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 46 OF 882 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2002:584157 BIOSIS
 DN PREV200200584157
 TI Microbial cellulases (**Review**).

AU Rabinovich, M. L. [Reprint author]; Melnick, M. S. [Reprint author]; Bolobova, A. V. [Reprint author]
 CS A.N. Bach Institute of Biochemistry, Russian Academy of Sciences, Leninskii Pr. 33, Moscow, 119071, Russia
 mrabinovich@inbi.ras.ru
 SO Prikladnaya Biokhimiya i Mikrobiologiya, (July-August, 2002) Vol. 38, No. 4, pp. 355-373. print.
 CODEN: PBMIAM. ISSN: 0555-1099.

DT Article
 General Review; (Literature Review)
 LA Russian
 ED Entered STN: 13 Nov 2002
 Last Updated on STN: 13 Nov 2002

AB Compositions of **cellulase**-hemicellulase systems of aerobic fungi (hyphomycetes, ascomycetes, and basidiomycetes), aerobic bacteria, actinomycetes, as well as anaerobic fungi and bacteria, are considered in the context of modern structural classification of glycosyl hydrolases. A new nomenclature of cellulases and relative enzymes based on their structural classification is reviewed. Some opportunities of **cellulase** improvement by means of protein engineering are discussed.

L2 ANSWER 38 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:663818 CAPLUS
 DN 138:35047
 TI The Structure and Mechanism of Action of Cellulolytic Enzymes

AU Rabinovich, M. L.; Melnick, M. S.; Bolobova, A. V.
 CS Bach Institute of Biochemistry, Russian Academy of Sciences, Moscow,
 119071, Russia
 SO Biochemistry (Moscow, Russian Federation)(Translation of Biokhimiya
 (Moscow, Russian Federation)) (2002), 67(8), 850-871
 CODEN: BIORAK; ISSN: 0006-2979
 PB MAIK Nauka/Interperiodica Publishing
 DT Journal; General Review
 LA English
 AB A **review**. The modern structural classification of
 polysaccharases comprising **cellulase**-hemicellulase enzyme
 systems is discussed. Their catalytic domains are currently grouped into
 15 of more than 80 known glycosyl hydrolase families, whereas substrate
 binding domains fall into 13 families. The structures of catalytic and
 substrate binding domains, as well as linker sequences, are briefly
 considered. A hypothetical mechanism of concerted action of catalytic and
 substrate binding domains of cellobiohydrolases on the surface of highly
 ordered cellulose is suggested.

RE.CNT 89 THERE ARE 89 CITED REFERENCES AVAILABLE FOR THIS RECORD
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L2 ANSWER 37 OF 882 AGRICOLA Compiled and distributed by the National
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 (2004) on STN DUPLICATE 3
 AN 2003:25193 AGRICOLA
 DN IND23319747
 TI Towards understanding the role of membrane-bound endo-beta-1,4-glucanases
 in cellulose biosynthesis.
 AU Molhoj, M.; Pagant, S.; Hofte, H.
 AV DNAL (450 P699)
 SO Plant and cell physiology, Dec 2002. Vol. 43, No. 12. p. 1399-1406
 Publisher: Kyoto, Japan : Japanese Society of Plant Physiologists.
 CODEN: PCPHA5; ISSN: 0032-0781
 NTE Includes references
 CY Japan
 DT Article; (SURVEY OF LITURATURE)
 FS Non-U.S. Imprint other than FAO
 LA English
 AB Recent studies have highlighted the involvement of membrane-anchored
 endo-beta-1,4-glucanases in cellulose biosynthesis in plants, suggesting
 that there are parallels with Agrobacterium tumefaciens and other bacteria
 which also require endo-beta-1,4-glucanases for cellulose synthesis. This
review summarises recent literature on endo-beta-1,4-glucanases
 and their role in plant development and addresses the possible functions
 of membrane-anchored isoforms in the synthesis of cellulose.

L2 ANSWER 35 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:431203 CAPLUS
 DN 139:137734
 TI The cellulases and their application in degrading agroindustrial waste
 AU Schwarz, Wolfgang H.
 CS Institute for Microbiology, Technical University of Muenchen, Freising,
 D-85350, Germany
 SO Revista Colombiana de Biotecnologia (2003), Volume Date 2002, 4(1), 6-13
 CODEN: RCBEAG; ISSN: 0123-3475
 PB Universidad Nacional de Colombia, Instituto de Biotecnologia
 DT Journal; General Review
 LA English
 AB A **review** concerning enzymic hydrolysis of agro-industrial waste
 cellulose by its natural degraders, anaerobic bacteria, is given. Topics
 discussed include: bio-processing of lignocellulosic biomass (what is
 cellulose, cellulose-degrading bacteria,; cellulosome structure, why so
 many components, carbohydrate binding mols.); and future perspectives of
 applying cellulases.

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 34 OF 882 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:333221 BIOSIS
 DN PREV200300333221
 TI Developments in industrially important thermostable enzymes: A
review.
 AU Haki, G. D.; Rakshit, S. K. [Reprint Author]
 CS Bioprocess Technology Program, Asian Institute of Technology (AIT), Klong
 Luang, P.O. Box 4, Pathumthani, 12120, Thailand
 rakshit@ait.ac.th
 SO Bioresource Technology, (August 2003) Vol. 89, No. 1, pp. 17-34. print.
 CODEN: BIRTEB. ISSN: 0960-8524.
 DT Article
 General Review; (Literature Review)
 LA English

ED Entered STN: 16 Jul 2003
Last Updated on STN: 16 Jul 2003

AB Cellular components of thermophilic organisms (enzymes, proteins and nucleic acids) are also thermostable. Apart from high temperature they are also known to withstand denaturants of extremely acidic and alkaline conditions. Thermostable enzymes are highly specific and thus have considerable potential for many industrial applications. The use of such enzymes in maximising reactions accomplished in the food and paper industry, detergents, drugs, toxic wastes removal and drilling for oil is being studied extensively. The enzymes can be produced from the thermophiles through either optimised fermentation of the microorganisms or cloning of fast-growing mesophiles by recombinant DNA technology. In this **review**, the source microorganisms and properties of thermostable starch hydrolysing amylases, xylanases, cellulases, chitinases, proteases, lipases and DNA polymerases are discussed. The industrial needs for such specific thermostable enzyme and improvements required to maximize their application in the future are also suggested.

L2 ANSWER 27 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:163735 CAPLUS
DN 138:217237
TI Mechanism of **cellulase** action on cellulose structure
AU Kanda, Takahisa
CS Dep. Chem. Mater. Eng., Fac. Eng., Shinshu Univ., Nagano, 380-8553, Japan
SO Journal of Applied Glycoscience (2003), 50(1), 77-81
CODEN: JAGLFX; ISSN: 1344-7882
PB Japanese Society of Applied Glycoscience
DT Journal; General Review
LA Japanese
AB A **review**. The mode of degradation of native cellulose has not been fully established. The mode of hydrolysis of highly purified cellulases, exo- and endo-type cellulases from fungi (*Irpelex lacteus*, *Trichoderma reesei* and *Aspergillus niger*) were investigated by using pure cellulosic materials with different crystallinities of cellulose I type in addition to bacterial celluloses of two type different types (cellulose I and II) and valonia cellulose. At the same time, we also investigated the hydrolysis action of exo- and endo-type cellulases by using water soluble substrates such as cellooligosaccharide and barley glucan. From these results, it was found that the characteristic mode of action of each **cellulase** can be clearly understood by using only pure crystalline cellulosic substrates. Furthermore, we will describe the synergistic actions of **cellulase** components in addition to related enzyme on cellulose degradation in this paper.

L2 ANSWER 23 OF 882 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 2
AN 2003:462690 BIOSIS
DN PREV200300462690
TI Regulation of *Trichoderma cellulase* formation: Lessons in molecular biology from an industrial fungus: A **review**.
AU Schmolli, Monika [Reprint Author]; Kubicek, C. P. [Reprint Author]
CS Area Molecular Biotechnology, Section Applied Biochemistry and Gene Technology, Institute for Chemical Engineering, Vienna University of Technology, Getreidemarkt 9/1665, A-1060, Wien, Austria
SO Acta Microbiologica et Immunologica Hungarica, (2003) Vol. 50, No. 2-3, pp. 125-145. print.
ISSN: 1217-8950 (ISSN print).
DT Article
General Review; (Literature Review)
LA English
ED Entered STN: 8 Oct 2003
Last Updated on STN: 8 Oct 2003
AB The present article reviews the current understanding of regulation of **cellulase** gene transcription in *Hypocrea jecorina* (= *Trichoderma reesei*). Special emphasis is put on the mechanism of action of low molecular weight inducers of **cellulase** formation, the presence and role of recently identified transactivating proteins (*Ace1*, *Ace2*, *Hap2/3/5*), and the role of the carbon catabolite repressor *Crel*. We also report on some recent genomic approaches towards understanding how **cellulase** inducers signal their presence to the transcriptional apparatus.

L2 ANSWER 26 OF 882 CABA COPYRIGHT 2004 CABI on STN
AN 2003:172442 CABA
DN 20033138113
TI Application of microbial genes for utilization of biomass
AU Kubo, S.; Morimoto, K.; Taguchi, H.; Kikuta, T.; Kimura, T.; Sakka, K.; Ohmiya, K.
CS Suzuka International University, Junior College, 1250 Syouno-cho, Suzuka, Mie 513-8520, Japan. ohmiya@bio.mie-u.ac.jp
SO Bulletin of the Faculty of Bioresources, Mie University, (2003) No. 30, pp. 115-121. 24 ref.
Publisher: Faculty of Bioresources, Mie University. Tsu

ISSN: 0915-0471

CY Japan
DT Journal
LA Japanese
SL English
ED Entered STN: 20031107
Last Updated on STN: 20031107

AB Microbial genes encoding cellulases, xylanases, chitinases and hydrogenases were expressed in plants and anaerobic bacteria for the effective degradation and conversion of un-utilized fibrous biomass to some nutrients and energy compounds. In this **review**, it was shown that these transgenic plants and bacteria work to convert un-utilized biomass to valuable materials. The effective ways to utilize biomass are also discussed.

L2 ANSWER 15 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:830935 CAPLUS
DN 140:58468
TI Amplification of **cellulase** genes and **cellulase** hyperproducers in Trichoderma: Minireview
AU Toyama, H.; Hotta, T.; Yamagishi, N.; Toyama, N.
CS Department of Food Science and Technology, Faculty of Horticulture, Minamikyushu University, Miyazaki, 884-0003, Japan
SO ACS Symposium Series (2003), 855(Applications of Enzymes to Lignocellulosics), 304-314
CODEN: ACSMC8; ISSN: 0097-6156
PB American Chemical Society
DT Journal; General Review
LA English
AB A **review**. Nuclear diameter in conidia and mycelia of Trichoderma reesei could be enlarged by a mitotic arrester, colchicine. This result means that chromosomes, including **cellulase** genes can be amplified by such reagent. Using this reaction, we constructed **cellulase** hyperproducers of this fungus. A haploidizing reagent, Benomyl, was used in order to carry out chromosomal (genetical) recombination. As the primary selection, double layer selection medium including selection substrates, Avicel, wood powder, or absorbent cotton contributed to selecting hyperproducers. As the secondary selection, Avicel liquid medium test could be used. In this report, we demonstrate the nuclear changes by colchicine treatment and the consequent pathway of selection of **cellulase** hyperproducers in Trichoderma.

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ti 51-75

L2 ANSWER 51 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
TI Efficient synthetic method of obtaining oligosaccharide units and derivatives utilizing endoglycosidases

L2 ANSWER 52 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
TI Why do plants need **cellulase**?

L2 ANSWER 53 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
TI Microbial enzymes in the biocontrol of plant pathogens and pests

L2 ANSWER 54 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
TI Progress of alkaline **cellulase** that use in laundry detergents

L2 ANSWER 55 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
TI Trapping covalent intermediates on β -glycosidases

L2 ANSWER 56 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
TI Role of biotechnology in finishing of denim fabrics

L2 ANSWER 57 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
TI Recent advanced technology of detergent enzymes

L2 ANSWER 58 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
TI Possibility of constructing as a polynuclear Shiitake mushroom by autopolyploidization and haploisization

L2 ANSWER 59 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
TI Polymorphism of cellulases

L2 ANSWER 60 OF 882 CABA COPYRIGHT 2004 CABI on STN
TI [Tolerance mechanisms of "Saracura" (BRS 4154) maize variety to flooding]. Mecanismos de tolerancia da variedade de milho "Saracura" (BRS 4154) ao alagamento.

L2 ANSWER 61 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN

TI **Cellulase**

L2 ANSWER 62 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Application study on microbial **cellulase**

L2 ANSWER 63 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI New insights into cellulose degradation by cellulases and related enzymes

L2 ANSWER 64 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Development of hypoallergenic wheat flour and analysis of its allergy preventive and curative effects

L2 ANSWER 65 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Reconsideration on fungal system of cellulose biodegradation

L2 ANSWER 66 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Application of the remarkable capabilities of extremophiles

L2 ANSWER 67 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Enzyme based eco-friendly detergents

L2 ANSWER 68 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Development of marine silage for the young of shells and fishes by protoplasting and fermenting seaweeds

L2 ANSWER 69 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Improved biochemical methods for the characterization of **cellulase** activity and mode of action

L2 ANSWER 70 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Development of **cellulase** production by bacteria fermentation

L2 ANSWER 71 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI The Japan wood research society prize for 2001: Fruiting properties on growth of edible basidiomycete

L2 ANSWER 72 OF 882 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN DUPLICATE 4
 TI Hydrolysis of lignocellulosic materials for ethanol production: a **review**.

L2 ANSWER 73 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Trichoderma reesei cellulases in processing of cotton

L2 ANSWER 74 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI In vitro synthesis of cellulose and related polysaccharides

L2 ANSWER 75 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 TI Cell surface display: A novel expression system of proteins

=> d bib abs 61

L2 ANSWER 61 OF 882 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:961927 CAPLUS
 DN 138:384257
 TI **Cellulase**
 AU Uzura, Kensaku
 CS Dept. of Bioproduction, Nagase Chemtex Co., Ltd., Japan
 SO Bio Industry (2002), 19(11), 38-44
 CODEN: BIINEG; ISSN: 0910-6545
 PB Shi Emu Shi Shuppan
 DT Journal; General Review
 LA Japanese
 AB A **review** on the origin, enzymic properties, classification, and application of **cellulase** in food industry.

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STN INTERNATIONAL SESSION SUSPENDED AT 14:34:36 ON 24 JUN 2004